

**REMARKS**

Claims **1-10, 13-20, 23-30, 33-45** and **51-66** are pending in the application.

Claims **1-10, 13-20, 23-30, 33-45** and **51-66** stand rejected.

Claims **1, 15-20, 23-25, 35, 38, 42-45, 52, 57** and **61-65** have been amended. Support for the amendments can be found throughout the originally-filed Application, and at least at paragraphs [0020], [0029] and [0032] and Figures 2 and 4.

**Claim Objections**

Claims 38-40 and 42-45 are objected to in the present Office Action. Claim 38 has been corrected to recite “communications network,” as suggested by the Office Action. Claims 42-45 have been amended to recite “said first link,” as suggested by the Office Action. Applicants respectfully submit that the Examiner’s concerns are addressed thereby. Accordingly, the objections for claims 38-40 and 42-45 are believed to be moot.

**Rejection of Claims under 35 U.S.C. § 112**

Claims 15-20, 23-24, 42, 52, 57, and 62 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants respectfully traverse this rejection in view of present amendments to independent claim 15, which now provide for “a network element comprising: a processor; and a memory coupled to said processor, said memory storing instructions executable by said processor to implement: a link failure propagation module, configured to” perform the acts detailed in claim 15. Applicants respectfully submit that the Examiner’s concerns are addressed thereby. Applicants therefore respectfully request the Examiner’s reconsideration and withdrawal of the rejection to independent claim 15, and all claims depending therefrom, and an indication of the allowability of same.

*Rejection of Claims under 35 U.S.C. § 103(a)*

Claims 1-10, 13-20, 23-30, 33-45, 51-60, and 66 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over Saksio, U.S. Patent Publication No. 2004/0105390 (“Saksio”) in view of Masuyama et al., U.S. Patent Publication No. 2005/0058063 (“Masuyama”). Applicants respectfully traverse this rejection.

Without conceding to the validity of this rejection, Applicants have amended independent claims 1, 15, 25, 35 and 38 to recite limitations that are not taught or fairly suggested by the cited references. Accordingly, Applicants respectfully submit that the amended claims are patentably distinguishable over the cited references.

For example, claim 1 now recites that the first port is associated with a virtual network. In response to detecting a failure of a first link coupled to the first port, a second port that is associated with the virtual network is identified and disabled. The newly added limitations are similar to limitations previously recited in dependent claim 61, which were rejected under Gai on page 31 of the Office Action. The Office Action acknowledged that Saksio, Masuyama, and Hebert failed to teach the similar previously-recited claim limitations. The cited sections of Gai fail to teach the claimed acts of identifying a second port that is associated with the virtual network, and disabling the identified second port, in response to detecting a failure of the first link.

Gai’s system uses a spanning tree to block ports on a switch in order to provide a loop-free path within Gai’s network (Gai 2:25-37). Only one port (root port) of Gai’s switch is included in the spanning tree as an active port and is placed in a forwarding state, while all other ports of the switch are placed in a blocked state (Gai 2:49-57). Gai also uses the spanning tree to determine a backup port for Gai’s root port. If Gai’s active root port fails, the backup port is transitioned into an active state and becomes the new active port for the switch (Gai 12:9-37 and FIG. 3D). Thus, in response to a failure at a root port, Gai’s system selects another port to become active in order to continue communications via Gai’s switch. By contrast, claim 1 provides that, in response to detecting a failure of the first link, a second port is identified and disabled, which stops communications via the network element and thus conveys the failure downstream. One

skilled in the art would understand that Gai's act of selecting of a backup port to become active fails to show, teach, or fairly suggest the claimed act of identifying a second port to become disabled since the acts accomplish different results (Gai's switch continuing communications versus the claimed network element stopping communications in order to convey the failure downstream).

This distinction is further illustrated, as shown in Figure 1 of Gai, where both the root port (port 3) and backup port (port 4) of Gai's switch are coupled to an upstream portion of the network via two upstream links (or links in the same direction). One would expect that if Gai's root port is connected to (and communicating with) a portion of the network via an upstream link, Gai's backup port must also be connected to the same portion of the network via another upstream link in order to continue those communications in the event of a failure of the root port. By contrast, the claimed first and second ports of the network element are coupled to different portions of the communications network via upstream and downstream links (i.e., the first link is coupled between the network element and the upstream portion of the communications network, and the second link is coupled between the network element and the downstream portion of the communications network), allowing the network element to convey the failure downstream. One skilled in the art would understand that the switch in Gai that is coupled to the same portion of a network fails to show, teach, or fairly suggest the claimed network element coupled to different portions of a communications network, at least because Gai's switch and the claimed network element accomplish markedly different results (Gai's switch continuing communications (with no failure propagated) versus the claimed network element stopping communications in order to convey the failure downstream).

Finally, the cited sections of Gai disclose that a port may be associated with a virtual local area network (VLAN) designation. Since a separate spanning tree is defined for each VLAN designation, a port may be in a forwarding state for one VLAN designation while being in a blocked state for another VLAN designation (Gai 15:47-16:22). However, the separate spanning trees for each VLAN designation still operate as discussed above: in the event that a root port fails, the spanning tree (or spanning tree state machine) determines a backup port for activation. By contrast, claim 1 provides

that, in response to detecting a failure of the first link, a second port is identified and disabled. As discussed above, one skilled in the art would understand that Gai's act of selecting of a backup port to become active fails to show, teach, or fairly suggest the claimed act of identifying a second port to be, at least because such acts accomplish markedly different results (Gai's act of continuing communications versus the claimed act of stopping communications in order to convey the failure downstream). Accordingly, the cited sections of Gai fail to disclose the claimed acts of identifying a second port that is associated with the virtual network, and disabling the identified second port, in response to detecting a failure of the first link.

For at least these reasons, Applicants respectfully submit that independent claim 1, as amended, is patentably distinguishable over the cited sections of Saksio, Masuyama, Gai, and Hebert, alone or in permissible combination. For similar reasons, independent claims 15, 25, 35, and 38 are also patentably distinguishable over the cited references. Applicants therefore respectfully submit that independent claims 1, 15, 25, 35, and 38, and all claims depending therefrom, are in condition for allowance. Applicants therefore respectfully request the Examiner's reconsideration and withdrawal of the rejection to these claims and an indication of the allowability of same.

Claims 61-65 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over Saksio and Masuyama, and further in view of Gai et al., U.S. Patent No. 6,535,491 ("Gai") and Hebert, U.S. Patent No. 6,728,780 ("Hebert"). Applicants respectfully traverse this rejection for at least the reasons set forth above with respect to independent claims 1, 15, 25, 35, and 38.

**CONCLUSION**

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicants hereby petition for such extensions. Applicants also hereby authorize that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to Deposit Account 502306.

Respectfully submitted,

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